

Work Order ID 79718

February-01-12 8:15:07 AM

79718

Page 1

Item ID: D2574 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Aft In 205
 Start Date: 01/02/2012 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 21/02/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: M.L.J Date: 12/02/12 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2574	Rev E								

100 0.00 ***100*** HAAS CNC VERTICAL MACHINING #1
 HAAS 1 Memo 0.00
 HAAS CNC vertical machine #1 Program Batch No. 379718 Double check by: KE 1-Machine Step
 No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine
 Step No 2 per Folio FA051 and inspect per attached Dimension Sheets3-
 Machine Step No 3 per Folio FA051 and insp

110 0.00 ***110*** CONVENTIONAL MILLING MACHINE
 Mill Conv Memo 0.00
 Conventional Milling Machine Machine keyway as per dwg D2573 & D2574

120 0.00 ***120*** QC2- Inspect parts off machine FAI/FAIB
 QC Memo 0.00
 Quality Control

Handwritten notes:
 12-3-2
 12-03-04 x (12)
 12-03-04 x (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79718

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Page 2

Item ID: D2574 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Aft In 205
 Start Date: 01/02/2012 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 21/02/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00		<i>OK 12/03/05</i>		<i>12</i>	<i>X</i>		
Quality Control									

140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									

12 X Ø M-12/03/06

150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
150									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <i>8h45</i> OVEN TEMPERATURE: <i>320°r</i> FINISH TIME: <i>9h15</i>								

12 X Ø M-12/03/06

m120 222

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79718

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Page 3

Item ID: D2574 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle, Aft In 205
Start Date: 01/02/2012 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 21/02/2012 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							12x 12/03/08
Quality Control									
170	Identify as per dwg & Stock Location: <u>433</u>	0.00							
170									
Packaging	Memo	0.00							12/03/08
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							MLJ 12/03/08
Quality Control									

12-03-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February-01-12 8:15:11 AM

Page 1

Work Order ID: 79718

79718

Parent Item: D2574

D2574

Parent Item Name: Saddle, Aft In 205

Start Date: 01/02/2012

Required Date: 21/02/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev: 1 As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005		Manufactured	No			110	Each	8.0000	1	12			

D6101-005

Saddle Billet

**

24 12.3.2

Location	Loc Qty	Loc Code
MAT041	4	
71721	1	
76838	3	
MAT045	1	
74507	1	
MAT046	3	
66966	3	

77588

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

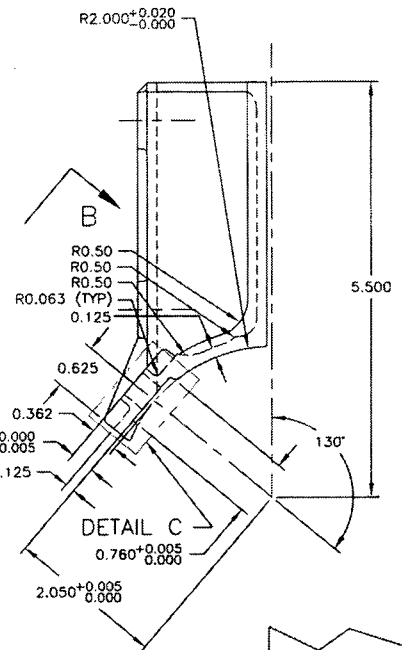
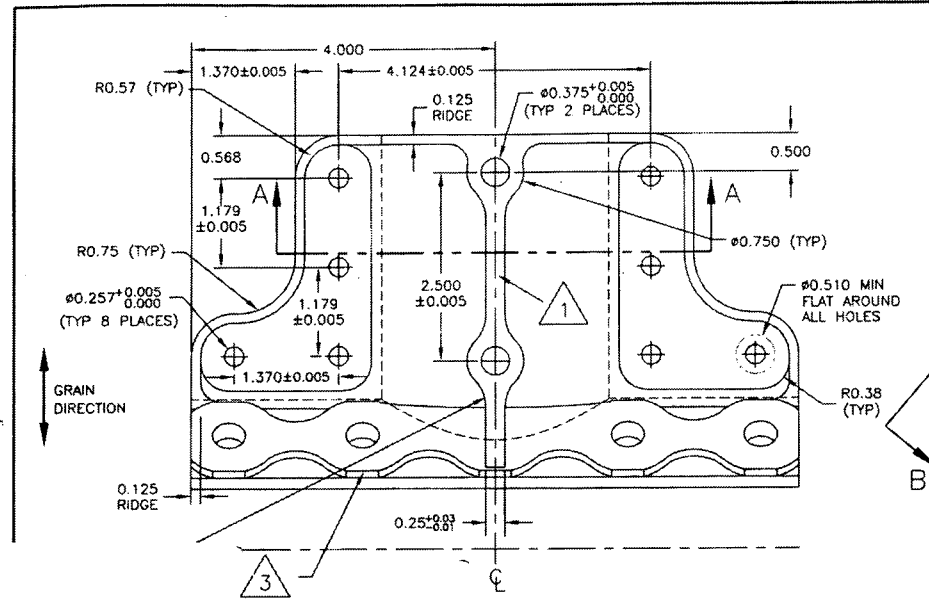
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

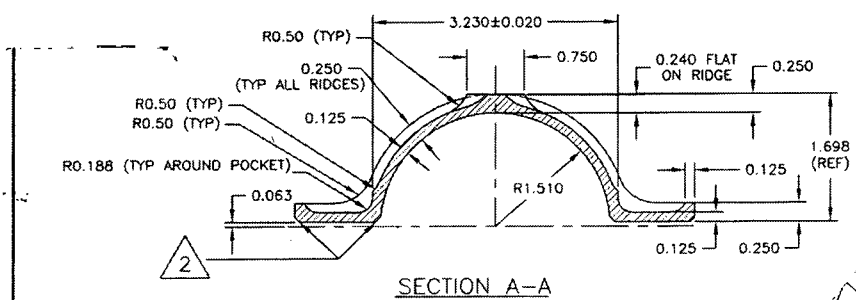
RELEASED
05.12.06



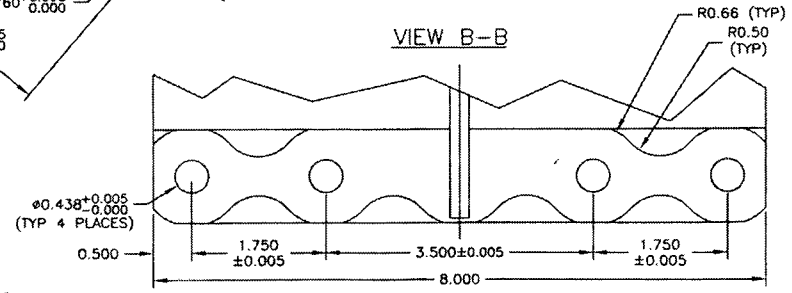
NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-003)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

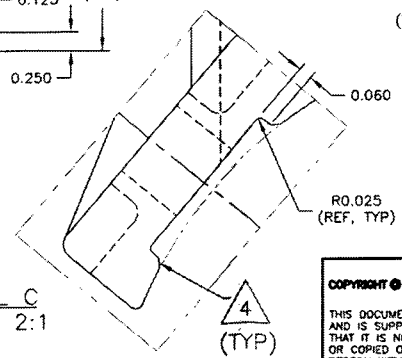
- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C)



SECTION A-A



VIEW B-B



DETAIL C
SCALE 2:1

UNCONTROLLED
SUBJECT TO APPROVAL

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	✓	APPROVED
DATE	05.07.13	DRAWING NO. D2574
		TITLE INNER AFT SADDLE

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DART AEROSPACE LTD.
MARKHAM, ONTARIO, CANADA

WORK
39718 M.C.J
12/02/01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	79718
Description: Saddle, Aft Inboard	Part Number:	D2574
Inspection Dwg: D2574 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.747	1.750	1.750	1.750		
C	3.495	3.505		3.496	3.500	3.500	3.500		
D	1.745	1.755		1.75	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.003	8.003	8.003		
F	0.490	0.510		.501	.505	.505	.505		
G	0.257	0.262	OK - 4	.2575	.258	.258	.259		
H	0.375	0.380	"	.3765	.377	.377	.376		
I	0.490	0.510		.501	.501	.503	.502		
J	1.174	1.184	"	1.175	1.177	1.178	1.178		
K	0.558	0.578		.5685	.567	.567	.567		
L	1.174	1.184		1.177	1.178	1.179	1.178		
M	1.365	1.375		1.369	1.368	1.369	1.37		
N	2.495	2.505		2.497	2.500	2.500	2.499		
O	4.119	4.129		4.121	4.122	4.122	4.123		
P	0.115	0.135	OK - 1	.124	.1237	.123	.123		
Q	0.115	0.135		.127	.126	.130	.130		
R	0.240	0.260	OK - 1	.254	.254	.253	.254		
S	0.115	0.135		.131	.131	.131	.131		
T	0.178	0.198	OK - 2 gauge	.188	.188	.188	.188		
U	3.210	3.250		3.224	3.225	3.226	3.226		
V	0.230	0.250		.237	.239	.235	.240		
W	0.115	0.135		.129	.127	.123	.126		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.761	.761	.761	.761		
Z	0.352	0.372		.362	.365	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.628	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.243	.251	.247	.252		
AE	1.500	1.520	HAA5 2	1.512	1.511	1.511	1.513		
AF	0.115	0.135		.127	.132	.135	.135		
AG	0.240	0.280	OK - 4	.268	.270	.271	.271		
AH	0.240	0.260		.249	.249	.249	.252		
AI	2.000	2.020	HAA5-2	2.003	2.004	2.003	2.003		
AJ	0.023	0.043							
Accept/Reject									

Measured by:	AK / RQ
Date:	12.3.2

Audited by:	AK
Date:	12/03/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	79718
Description: Saddle, Aft Inboard	Part Number:	D2574
Inspection Dwg: D2574 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				A 5	2 L	8 7	4 8		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.003	8.003	8.004	8.002		
F	0.490	0.510		.502	.503	.502	.503		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.502	.502	.501	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.122	.126	.124	.124		
Q	0.115	0.135		.130	.130	.130	.130		
R	0.240	0.260		.253	.255	.252	.252		
S	0.115	0.135		.134	.130	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.240	.239	.237	.237		
W	0.115	0.135		.127	.127	.124	.124		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.761	.761	.761	.761		
Z	0.352	0.372		.365	.365	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.629	.629	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.252	.252	.252	.252		
AE	1.500	1.520		1.513	1.516	1.514	1.514		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.247	.252	.247	.247		
AI	2.000	2.020		2.003	2.003	2.003	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	RF	Audited by:	RF
Date:	12-3-2	Date:	12/03/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

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				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	#9	#10	#11	#12		
A	0.438	0.443		.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.004	8.004	8.003	8.004		
F	0.490	0.510		.502	.504	.501	.503		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.501	.501	.501	.498		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.565	.568	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.127	4.124	4.124	4.124		
P	0.115	0.135		.124	.123	.123	.123		
Q	0.115	0.135		.130	.130	.130	.130		
R	0.240	0.260		.252	.252	.252	.252		
S	0.115	0.135		.131	.130	.131	.131		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.226	3.227	3.227	3.229		
V	0.230	0.250		.237	.238	.236	.234		
W	0.115	0.135		.129	.128	.129	.128		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.761	.761	.761	.761		
Z	0.352	0.372		.365	.362	.363	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.624	.626	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.251	.247	.253	.248		
AE	1.500	1.520		1.513	1.513	1.515	1.514		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.247	.251	.249	.248		
AI	2.000	2.020		2.010	2.006	2.009	2.012		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	29
Date:	12-3-2

Audited by:	am
Date:	12/03/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	